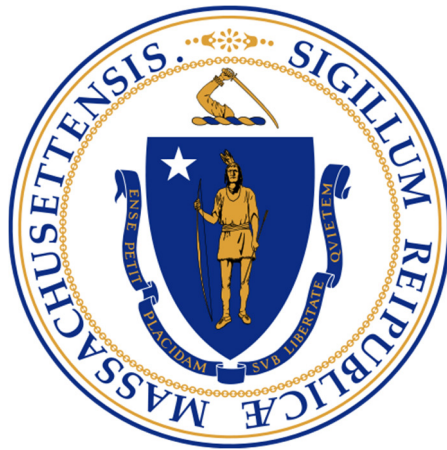


# Executive Office for Energy and Environmental Affairs

Commonwealth of Massachusetts



Performance Report  
Fiscal Year 2014

Maeve Valley Bartlett  
Secretary

## Introductory Letter from the Secretary

Since 2007, the Patrick Administration has worked to make state government more effective, more accountable, and more open. In keeping with this commitment we present this report – which captures the Executive Office of Energy and Environmental Affairs (EEA) performance over the past two fiscal years. EEA is the first state Cabinet-level office in the nation that oversees both environmental and energy agencies. In putting energy and environment under one roof, Governor Deval Patrick set a course toward a clean energy future, and the six agencies under EEA are following that direction with vigor, in close collaboration with the Legislature and many outside partners. The agencies and offices of EEA also preserve open space, species habitat, and working landscapes; enforce pollution laws to protect public health and natural resources; review the environmental impact of major real estate and infrastructure developments; enhance the state's role in energy conservation and production; manage fish and wildlife; and provide opportunities for outdoor recreation and access at the parks, beaches, and farms that make Massachusetts such a wonderful place to live, work, learn, and play.

We present this report to you at the end of the Patrick Administration's term as a way to capture our accomplishments and highlight the areas in which we still have work to do.

The work of EEA is summarized in three broad goals:

- Sustainable economic development
- Quality of life
- Resource protection

Under each of these goals, EEA has developed subgoals to drive their achievement that are shared by its Agencies and Offices: the Departments of Agricultural Resources; Conservation and Recreation; Energy Resources; Environmental Protection; Fish and Game; and Public Utilities; Massachusetts Environmental Policy Act Office (MEPA); Massachusetts Office of Coastal Zone Management (CZM); Office of Law Enforcement (Environmental Police); the Office of Technical Assistance; and the Division of Conservation Services. Highlights of the great work being done across EEA, its Agencies and Offices, and through its external partners, are depicted in the following pages.

As this performance report shows, EEA has accomplished much in its quest to appropriately balance the achievement of its goals on behalf of the citizens of this great Commonwealth. We thank you for the opportunity to serve.

Maeve Vallely Bartlett, Secretary

**This report was developed pursuant to Executive Order 540, Governor Patrick's directive to embed strategic planning and performance management across state government.**

**Review of this document should be made in conjunction with the Executive Office of Energy and Environmental Affairs (EEA) 2013-2015 Strategic Plan. This report provides an update of EEA's FY14 progress towards achieving its strategic goals by evaluating the secretariat's performance against a previously identified set of key performance measures.**

**Please send feedback regarding this report to:**

**Sean Navin**  
**[Sean.navin@state.ma.us](mailto:Sean.navin@state.ma.us)**

## Performance Narrative

### Goal 1: Sustainable Economic Development

#### Subgoals:

- Conduct permitting efficiently and responsively.
- Plan, regulate, and invest consistent with the Massachusetts Sustainable Development Principles.
- Promote the development of an innovative clean energy and efficient energy resources sector in Massachusetts.
- Support the Commonwealth's legacy, resource-based industries (i.e., commercial fishing, farming, and forestry).

Building on a regulatory reform effort that has already made doing business in Massachusetts easier for thousands of businesses, all 1,791 executive branch regulations in existence as of January 2012 have been reviewed for efficiencies and effectiveness. In October 2011, Governor Patrick announced the Administration's thorough process of reviewing rules and regulations, focusing on finding regulations that are duplicative, out-of-date or in need of update and creating the changes necessary to improve or eliminate those regulations. This review is the first comprehensive effort of its kind in Massachusetts history, and one of the first completed reviews in the Nation, allowing the Patrick Administration to make substantial strides to ease the cost of doing business in Massachusetts. With this comprehensive review of regulations across state government complete, nearly 15 percent of all regulations have had some action taken. The initiative included a comprehensive review and re-evaluation of existing regulations, a systematic and coordinated process for regulators to consider economic impacts for newly-proposed regulations, public reporting of small business impacts for all regulatory changes to improve transparency during the public rule-making process and partnerships with the regulated community to share responsibility for creating a balanced regulatory environment.

In March 2014 Governor Deval Patrick joined state agriculture officials, farmers and students to celebrate Agriculture Day at the State House, and accepted an award for his commitment to investing in Massachusetts agriculture. Agriculture Day brings farmers and agricultural organizations together to showcase locally grown food and farm products and to educate legislators about issues affecting the agricultural community. Farmers participating today met with Representatives and Senators to discuss the challenges they face, including the importance of consistent local regulations affecting the industry and value of recognizing small farms as a vital part of Massachusetts' agricultural landscape. Capping off the festivities was a reception held in Great Hall, known as the "Taste of Massachusetts." Farmers and specialty foods producers, including produce, dairy, livestock and aquaculture farmers, offered samples of locally harvested and produced items from oysters, cranberry juice and apple pies to cheese, honey and milk shakes. During the event, DAR officials highlighted the Commonwealth's commitment to promoting statewide programs that foster agricultural diversification, culinary tourism, agricultural business training, animal health, pest management and encourage energy efficient farm operations.

The Massachusetts clean energy sector saw double-digit job growth for the third consecutive year and now employs more than 88,000 workers in the Commonwealth. [The 2014 Massachusetts Clean Energy Industry Report](#), shows that the clean energy sector has grown by nearly 50 percent since 2010 and now includes 88,372 employees and 5,985 businesses. From July 2013 to July 2014, clean energy jobs in Massachusetts grew by 10.5 percent. The Massachusetts clean energy sector is now a \$10 billion industry, responsible for 2.5 percent of Massachusetts' Gross State Product. Employers are optimistic about the future, predicting a 13.3 percent jump in clean energy employment over the next year, with clean energy employment expected to surpass 100,000 in early 2015. For the second consecutive year, the southeastern region, with 22 percent job growth, is the fastest growing Massachusetts clean energy economy. Statewide, energy efficiency jobs are the largest segment of the clean energy workplace with 65,000 workers, and energy efficiency employment makes up half of the jobs at clean energy startup companies. Renewable energy employment accounts for 21,000 jobs with more than 12,000 of those jobs related to Massachusetts' growing solar industry.

## Goal 2: Quality of Life

### Subgoals:


- Protect public health by ensuring healthy air, safe drinking water, and low exposure to contaminants.
- Improve access to and quality of outdoor recreational opportunities.
- Increase the public's access to locally-grown food, agriculture, wood, and fisheries products.
- Enhance access to reliable, efficient, clean, and cost-effective energy resources within a framework where Massachusetts serves as a national leader in renewable and clean resource development.

For the first time since the Massachusetts Department of Environmental Protection (MassDEP) began tracking ozone (or "smog") levels in the 1970s, the agency did not register a single air quality exceedance of the ozone standard during the 2014 Summer Ozone Season. As a result, zero "bad-air-day" alerts were issued from April to September this year. At 18 sites across the Commonwealth, MassDEP tracks ozone to ensure air quality for Massachusetts residents. The agency posts that data in real time on its web site to assist the public, especially those sensitive to air pollutants, in determining whether they should limit their activities outside. Air pollution monitoring in Massachusetts began in the 1970s when the U.S. Environmental Protection Agency (EPA) set the first air quality standards. Since then, the EPA has tightened the ozone standards to make them more health-protective. In 1997, EPA went from a 1-hour standard to a more stringent 8-hour standard of 0.08 parts per million (ppm), which was designed to be more representative of ozone exposure over time, and lowered it further to 0.075 ppm in 2008. Since 2010, ozone exceedances, or bad-air days, totaled: 2014 - 0; 2013 - 6; 2012 - 17; and 2011 - 10. This represents a trend toward cleaner air.

Governor Deval Patrick announced a \$10.3 million investment to build or renovate playgrounds and spray parks in all 54 cities in Massachusetts. Through the Our Common Backyards program, EEA will commit up to \$200,000 to fund projects in each city. Most projects will go into construction over the spring and summer, with the goal of completing all 54 projects by the end of 2014. EEA worked with each city to agree on projects that advanced the goals of the program and the communities. In most cases, cities are contributing additional funding towards the construction of playgrounds and spray parks. In total, cities are expected to spend nearly \$4.5 million this year to improve parks in connection with the Our Common Backyards program. According to a report by The Trust for Public Land, outdoor recreation generates \$10 billion in consumer spending, \$739 million in state and local tax revenue and \$3.5 billion in wages and salaries each year in Massachusetts. This report also found that the state's Gateway City Parks investments will create nearly 500 jobs and \$26.5 million in local wages and salaries.

Completed fifteen fishing and boating access projects valued at more than \$2.2 million. DFG's Office of Fishing and Boating Access (FBA) manage manages the construction, repair and operation of state boat ramps, canoe and car-top launch sites, parking areas and approach roads. The FBA oversees facility design and construction, which is usually done by private contractors or municipal public works departments. FBA funds are also used to construct ADA-compliant sport fishing piers and to purchase and improve shoreline fishing areas.

Regional Buy Local groups connect farmers to their surrounding communities and vice versa. Buy Local groups began in 1993 in the Pioneer Valley and are committed to the idea that knowing where your food comes from makes both good health and economic sense. Originally formed to identify and address marketing challenges in specific geographical communities across the Commonwealth, these groups have grown as a sustainable business movement that includes innovative marketing and educational programs. The Commonwealth has also launched one of the nation's first state-funded urban farming initiatives, ranks fifth in the nation for direct market sales, hosts 134 farmers' markets that accept SNAP and since 2007 has seen a 95 percent increase in Community Supported Agriculture (CSA) and growth in agritourism sales of 127 percent.

In December 2014, EEA designated thirteen new Green Communities, now with a total of 136 participating cities and towns, more than half of all Massachusetts residents now live in a Green Community. In addition to recognizing the new communities, Governor Patrick celebrated the success of seven communities in achieving the program's 20 percent energy use reduction goal and released the program's [first ever progress report](#) . Green Communities grants have already supported more than 500 completed projects across the Commonwealth, projected to deliver annual energy cost savings of nearly \$4 million.

For the fourth year in a row, the American Council for an Energy-Efficient Economy (ACEEE) has ranked Massachusetts first in the nation for energy efficiency policies and programs. The Patrick Administration continues to expand on proven strategies and create new approaches to help businesses, cities and towns, institutions, homeowners, renters and low-income residents save energy and manage costs.

### Goal 3: Resource Protection

#### Subgoals:








- Reduce greenhouse gas emissions 25% below 1990 levels by 2020, and at least 80% below 1990 levels by 2050.
- Conserve open space and working landscapes for current and future generations to provide clean air, clean water, and wildlife habitat.
- Manage fresh water and ocean resources in a sustainable manner.




The GWSA set goals of reducing our greenhouse gas emissions 25% by 2020 and 50% by 2050 and also prioritized planning for the impacts of climate change across a range of sectors. The Clean Energy and Climate Plan was produced with the input of a diverse range of stakeholders and outlines strategies to reach the 25% reduction in GHG by 2020. To date, emissions have declined 15%. Pursuant to the GWSA, EEA also produced a climate change adaptation report that includes a robust set of recommendations for consideration in order to address the anticipated impacts of climate change in Massachusetts, including rising sea levels, extreme precipitation, more intense storm events, and increased temperatures, among others. The Administration's Coordinated Climate Preparedness Initiative organizes all Executive Offices in order to implement best practices and innovative solutions that address the most critical impacts.








Since taking office, Governor Patrick has made a historic investment of more than \$360 million in land conservation focused on three goals: investing in urban parks, preserving working farms and forests and protecting large natural landscapes for habitat. This investment has resulted in the permanent protection of more than 125,000 acres of land and the renovation or creation of more than 210 parks. The new parks and open space created are within a 10 minute walk of 1.5 million residents – about a quarter of the Commonwealth's population. For the 26 Gateway Cities, the new conservation land and parks are within a 10 minute walk of over 500,000 residents – about 33% of all residents.




Released the first update to the Massachusetts Ocean Management Plan, which was released in 2009 as a nation-leading first comprehensive plan for state ocean waters. Required by the Oceans Act signed by Governor Patrick in May 2008, the ocean plan protects critical marine habitat and important water-dependent uses and sets standards for ocean-based development. The Oceans Act also requires that the plan be updated at least every five years. In January 2013, EEA initiated the review and update of the ocean plan, which was led by EEA's Office of Coastal Zone Management (CZM). These efforts were guided by input and advice from a 17-member Ocean Advisory Commission and nine-member Ocean Science Advisory Council.

## Performance Dashboard








Sustainable Economic Development							
Conduct Permitting Efficiently and Responsively	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Percent of permit applications that are reviewed within the guaranteed timelines	98.77%	98.68%	98.91%	Stable	100%		Data compares FY12, FY13 and FY14.
Percent of permit applications that are reviewed within 180 days of receipt	96.64%	97.53%	97.69%	Stable	90%		Data compares FY12, FY13 and FY14.
Percent of adjudicatory appeals resolved within 6 months from when the appeal is filed	85.00%	85.71%	87.50%	Stable	100%		Data compares FY12, FY13 and FY14. For current period some appeals still open but within the same timeframe; excludes stayed cases and those on remand. For prior period, despite the agency target of 6 months, by regulation (310 CMR 10.05(8)), appeals that are deemed major have a seven month time-frame for resolution.
Plan, Regulate, and Invest Consistent with the Massachusetts Sustainable Development Principles	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Percent of working age residents living within a three quarters of a mile of public transit	NA	69%	NA	NA	INCREASE OVER PRIOR YEAR		From 2010 Census: Greater Boston area only.
Percent of jobs reachable via public transit in 90 minutes	NA	30%	NA	NA	INCREASE OVER PRIOR		From 2010 Census: Greater Boston area only.
Percent of median household income comprised of housing and transportation costs	NA	47%	NA	NA	DECREASE OVER PRIOR YEAR		From 2010 Census: Greater Boston area only.
Massachusetts counties where median household income comprised of housing and transportation costs is below 45%	NA	1 of 14	NA	NA	14 OF 14		Barnstable, 50.66. Bristol, 52.17. Essex, 47.19. Franklin 56.13. Hampden 50.56. Hampshire 56.58. Middlesex 48.11. Norfolk 50. Plymouth 50.67. Suffolk 38.26. Worcester 49.72. Berkshire, Dukes, & Nantucket not calculated due to insufficient sample size.




<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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Promote the Development of an Innovative Clean Energy and Efficient Energy Resources Sector in Massachusetts							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of employees in sector energy and efficient energy resources sector.	71,523	79,994	88,372	Improving	INCREASE OVER PRIOR YEAR		Data compares FY12, FY13 and FY14.
Number of businesses defined as "clean energy firms"	4,995	5,577	5,985	Improving			Data compares FY12, FY13 and FY14.
Number of megawatts of renewable or alternative energy installed	205	350	700	Improving			Data compares FY12, FY13 and FY14.
Support the Commonwealth's Legacy, Resource-based Industries (Commercial Fishing)							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of commercial fishing-related businesses	9,444	9,285	9,217	Stable	STABILIZE LONG TERM DECLINING TREND		Data compares CY12, CY13 and CY14. After reviewing data from CY10 through CY14, this appears to within normal annual fluctuations.
Number of employees at commercial fishing-related businesses	90,018	98,358	107,064	Improving			Data compares CY10, CY11 and CY12.
Total commercial fishing economic impact (\$millions)	\$1,806.0	\$1,913.8	\$1,596.0	Worsening			Data compares CY11, CY12 and CY13.
Ex-vessel value of commercial fishing (\$millions)	\$641.8	\$680.0	\$567.0	Worsening			Data compares CY11, CY12 and CY13.

<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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Support the Commonwealth's Legacy, Resource-based Industries (Agriculture)							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Estimated agriculture total economic impact in dollars.	NA	NA	\$5,628	NA	STABILIZE LONG TERM DECLINING TREND		CY2010 from Farm Credit East report: Economic Impact of Agriculture and Forestry in Six Northeastern States.
Number of employees at farm and agriculture-related businesses in Massachusetts	0	25,022	27,924	Improving			USDA Census of Agriculture, 2007 report vs 2012 report.
Number of farm and agriculture-related businesses in Massachusetts	6,075	7,691	7,755	Improving			USDA Census of Agriculture, 2002 report vs 2007 report vs 2012 report.
Total revenue of farm and agriculture-related businesses in Massachusetts (\$millions)	\$384.3	\$489.8	\$492.2	Stable			USDA Census of Agriculture, 2002 report vs 2007 report vs 2012 report.
Support the Commonwealth's Legacy, Resource-based Industries (Forestry)							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of employees at forestry-related businesses	NA	NA	4,015	NA	STABILIZE LONG TERM DECLINING TREND		CY2010 from Farm Credit East report: Economic Impact of Agriculture and Forestry in Six Northeastern States.
Number of forestry-related businesses	NA	482	738	Improving			USDA Census of Agriculture, 2007 report vs 2012 report.
Total revenue for forestry-related businesses (\$millions)	NA	\$2.4	\$4.4	Improving			USDA Census of Agriculture, 2007 report vs 2012 report.




<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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## Quality of Life




Reduce Greenhouse Gas Emissions 25% below 1990 levels by 2020, and by 80% by 2050	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Massachusetts annual attainment status for the six National Ambient Air Quality Standards (NAAQS).	<i>In</i> Attainment: NOx Lead CO PM SO2 <i>Not</i> <i>in</i> Attainment: Ozone	<i>In</i> Attainment: NOx Lead CO PM SO2 <i>Not</i> <i>in</i> Attainment: Ozone	<i>In</i> Attainment: NOx Lead CO PM SO2 <i>Not</i> <i>in</i> Attainment: Ozone	Stable	ATTAINMENT FOR ALL SIX NAAQS POLLUTANTS	⚠	Data compares CY12, CY13 and CY14. Ozone non-attainment Dukes County only. All other MA counties are in full attainment. Attainment status of some pollutants based on average of 3 years of data.
Percentage of contaminated sites (oil or hazardous materials) that are cleaned up within 6 years of first being identified or listed	91.3%	92.4%	87.0%	Worsening	95%	⚠	FY07-FY12 vs FY08-FY13 vs FY09-FY14. This 6-year period experienced a slight drop-off, possibly due to: a) the economic downturn that peaked in this period; and b) anticipated regulation changes in June 2014 that significantly changed some site closure rules.
Percentage of contaminated sites with imminent hazard conditions where the imminent hazard is resolved within 90 days	99%	99%	99%	Stable	100%	⚠	FY12-FY14
Percentage of community public drinking water systems that meet all applicable health-based standards	84.4%	82.5%	80.1%	Worsening	100%	⚠	CY11-CY13. In accordance with the MassDEP's enforcement guidance, all systems that were not meeting standards at some point in the year have been addressed and brought into compliance or are on the path to compliance.

STATUS LEGEND		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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






Improve Access to and Quality of Outdoor Recreational Opportunities	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of MassParks Passes sold	2,577	2,694	NA	NA	INCREASE OVER PRIOR YEAR	NA	This includes Resident and Non Resident MassParks Passes which allow free parking at over 50 facilities that charge a parking fee.
Number of MassParks Passes Distributed Free to Libraries	197	226	NA	NA	INCREASE OVER PRIOR YEAR	NA	One Free MassParks Pass is offered to the main branch of the public library in all 351 cities and towns. Numbers reflect communities that have requested pass.
Number of MassParks Passes Distributed Free to Municipal Parks and Recreation Departments	85	98	NA	NA	INCREASE OVER PRIOR YEAR	NA	One Free MassParks Pass is offered to the parks and recreation departments in all 351 cities and towns. Numbers reflect communities that have applied for pass.
Number of inland fishing and hunting licenses sold annually in Massachusetts	214,865	225,899	219,951	Stable	STABILIZE LONG TERM DECLINING TREND		FY03-FY07 average vs FY08-FY12 average vs CY13. Due to annual fluctuations license sale trends are monitored on a 5-year average.
Number of boat ramps, fishing piers, canoe/cartop access sites, and ramps built or renovated	10	10	15	Increasing	8 to 16		Data compares FY12, FY13 and FY14.
Number of public municipal parks built or restored	31	24	25	Increasing	CREATION OR RESTORATION OF AT LEAST ONE PARK IN ALL		Data compares FY12, FY13 and FY14. The focus here is on urban municipalities within 51 targeted cities in Massachusetts.





<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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Increase Public's Access to Locally Grown Food, Agriculture, Wood and Fisheries Products							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of Commonwealth Quality Program participants.	75	88	133	Improving	INCREASE OVER PRIOR YEAR		Data compares FY12, FY13 and FY14.
Number of farmers' markets across the Commonwealth	NA	251	294	Improving	INCREASE OVER PRIOR YEAR		Data compares FY12, FY13 and FY14.
Number of schools participating in the Farm to School Project	NA	320	NA	NA	INCREASE OVER PRIOR YEAR	NA	FY13: 231 public schools, 89 colleges and independent K-12 schools, 114 farms.
Number of urban communities establishing guidelines and/or regulations encouraging the development of commercial agricultural enterprises	NA	14	20	Improving	INCREASE OVER PRIOR YEAR		Data compares FY13 and FY14.
Percentage of farmers' markets participating in the Supplemental Nutrition Assistance Program (SNAP)	NA	50%	46%	Worsening	INCREASE OVER PRIOR YEAR		Data compares FY13 and FY14.

<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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Enhance Access to Reliable, Efficient, Clean, and Cost-Effective Energy Resources within a Framework where Massachusetts serves as a National Leader in Renewable and Clean Resource Development							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
System Average Interruption Duration Index (SAIDI) : NSTAR Electric Company	127.92	72.188	70.148	Improving	TARGET FOR EACH COMPANY IS BASED ON PERFORMANCE EITHER ONE STANDARD DEVIATION ABOVE OR BELOW HISTORIC AVERAGE		CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Frequency Index (SAIFI): NSTAR Electric Company	1.22	0.843	0.8082	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Duration Index (SAIDI) : Fitchburg Gas and Electric Company (Until)	136.50	134.518	106.808	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Frequency Index (SAIFI): Fitchburg Gas and Electric Company (Until)	1.70	1.756	1.438	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Duration Index (SAIDI): Massachusetts Electric Company (National Grid).	114.32	123.234	116.278	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Frequency Index (SAIFI): Massachusetts Electric Company (National Grid).	1.25	0.961	0.9194	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Duration Index (SAIDI): Nantucket Electric Company (National Grid).	24.06	32.782	32.03	Stable			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Frequency Index (SAIFI): Nantucket Electric Company (National Grid).	0.43	0.319	0.3564	Stable			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Duration Index (SAIDI) : Western Massachusetts Electric Company	126.93	159.710	120.766	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.
System Average Interruption Frequency Index (SAIFI): Western Massachusetts Electric Company	1.00	1.162	0.979	Improving			CY96-CY05 vs CY08-CY12 vs CY09-CY13. CY14 data won't be available until March 2015.








Enhance Access to Reliable, Efficient, Clean, and Cost-Effective Energy Resources within a Framework where Massachusetts serves as a National Leader in Renewable and Clean Resource Development (con't)							
	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Total production capacity of offshore renewable energy in state and adjacent federal ocean waters	0	0	0	Stable	1,500 MEGA-WATTS BY 2020		Data compares FY12, FY13 and FY14.
Number of Green Communities in Massachusetts	103	110	123	Improving	INCREASE OVER PRIOR YEAR		Data compares FY12, FY13 and FY14.
Massachusetts American Council for an Energy-Efficient Economy (ACEEE) ranking	1	1	1	Stable	REMAIN IN TOP 3		Data compares FY12, FY13 and FY14. Massachusetts ranks #1 in the country for the fourth year in a row.
National ranking of retail cost of energy	43	47	45	Improving	IMPROVEMENT IN OUR RANKING		Data compares FY12, FY13 and FY14. Lower is better.




<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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## Resource Protection

Reduce Greenhouse Gas Emissions 25% below 1990 levels by 2020, and by 80% by 2050	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of million metric tons CO2 equivalent reduction from 1990 levels by sector (buildings, electricity, supply, transportation, non-energy).	83.32	83.6	80.0	Improving	71 MILLION METRIC TONS FOR 1/1/2020 TO		Data compares CY09, CY10 and CY11. 2011 is the last year of emissions data available, and there is a 2 1/4 year lag time for each new year of data. Many qualitative actions indicate good progress; see additional information at <a href="http://www.mass.gov/eea/air-water-climate-change/climate-change/massachusetts-global-warming-solutions-act/">http://www.mass.gov/eea/air-water-climate-change/climate-change/massachusetts-global-warming-solutions-act/</a>
Conserve Open Space and Working Landscapes for Current and Future Generations to Provide Clean Air, Clean Water, Local Agricultural Assets and Wildlife Habitat	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of acres protected	34,588	29,752	29,875	Stable	CONSERVE AND PROTECT THE BEST AVAILABLE ADDITIONAL AREAS EACH YEAR WITH LIMITED RESOURCES		Data compares FY12, FY13 and FY14. In October 2013 hit milestone of 200,000 acres protected. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.
Number of acres of water supply protected	1,812	762	1,882	Improving			Data compares FY12, FY13 and FY14. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.
Number of acres of protected via Agriculture Preservation Restrictions (APR)	1,684	1,696	1,712	Stable			Data compares FY12, FY13 and FY14. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.
Number of acres of Prime Agricultural Soils protected	9,003	8,822	6,565	Worsening			Data compares FY12, FY13, and FY14. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.
Number acres protected for BioMap2 Core Habitat and Critical Natural Landscapes	22,545	17,676	18,596	Improving			Data compares FY12, FY13 and FY14. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.
Number of acres of Prime Forest Soils protected	27,071	22,970	25,083	Improving			Data compares FY12, FY13 and FY14. EEA and its agencies are always striving to protect the most important land available with their finite resources. Each conservation effort follows a unique timeline, sometimes requiring years to complete.



Manage Fresh Water and Ocean Resources in a Sustainable Manner	Prior Period	Previous Period	Current Period	Trend	Target	Status	Comments
Number of wetland acres restored	143	91	240	Improving	75		Data compares CY11, CY12 and CY13.
Economic value of offshore renewable energy in state and adjacent federal ocean waters	0	0	0	Stable	NA		Data compares FY12, FY13 and FY14. Power purchase agreements (PPAs) are currently in place for 78 percent of Cape Wind's generation capacity.
Number of river miles restored annually	22	39	10	Worsening	25		Data compares CY11, CY12 and CY13.
Percentage of assessed rivers that are determined to be impaired every other year	53.8%	53.8%	NA	Stable	A NET REDUCTION EVERY TWO YEARS		Cumulative through Jan 2010 vs Cumulative through Jan 2012. Data updated every two years, with 9-12 month lag time for data availability. Waters with the biggest problems are targeted for assessment, and therefore this data is not indicative of all state waters.
Percentage of assessed lakes that are determined to be impaired every other year	56.9%	58.1%	NA	Stable	A NET REDUCTION EVERY TWO YEARS.		Cumulative through Jan 2010 vs Cumulative through Jan 2012. Data updated every two years, with 9-12 month lag time for data availability. Waters with the biggest problems are targeted for assessment, and therefore this data is not indicative of all state waters.
Percentage of assessed estuaries that are determined to be impaired every other year	90.3%	87.3%	NA	Stable	A NET REDUCTION EVERY TWO YEARS.		Cumulative through Jan 2010 vs Cumulative through Jan 2012. Data updated every two years, with 9-12 month lag time for data availability. Waters with the biggest problems are targeted for assessment, and therefore this data is not indicative of all state waters.
Number of gallons of water used per person per day	60	59	58	Improving	65		Data compares CY11, CY12 and CY13. Statewide average is below 65 target, even though only 60% of public water supplies have standard in permit.

<b>STATUS LEGEND</b>		=> Target		=> 75% to <99%		< 75% of Target	NA	Not Applicable
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## Measure Descriptions

GOAL	MEASURE	DESCRIPTION
<b>Sustainable Economic Development</b>	Percent of permit applications that are reviewed within the guaranteed timelines.	This measure tracks the number of permit requests submitted to MassDEP that are reviewed within the appropriate timeline divided by the total number of permit requests submitted to MassDEP.
	Percent of permit applications that are reviewed within 180 days of receipt	This measure tracks the number of permit requests submitted to MassDEP that are reviewed within 180 days of receipt divided by the total number of permit requests submitted to MassDEP.
	Percent of adjudicatory appeals resolved within 6 months from when the appeal is filed	This measure tracks the number of adjudicatory appeals resolved within 6 months of filing divided by the total number of adjudicatory appeals filed.
	Percent of working age residents living within a three quarters of a mile of public transit	This measure tracks the number of Greater Boston area residents between the ages of 18 and 64 who live within 3/4 of a mile of a public transit stop.
	Percent of jobs reachable via public transit in 90 minutes	This measure tracks the percentage of jobs held by Greater Boston area residents between the ages of 18 and 64 which can be reached via public transportation within 90 minutes (denominator is the total number of jobs held by those same working age residents).
	Percent of median household income comprised of housing and transportation costs	This measure tracks the percentage of the median household income in the Greater Boston Area is spent on housing and transportation costs. The primary data source is the American Community Survey from the U.S. Census. Source: Center for Neighborhood Technology at <a href="http://htaindex.cnt.org/">http://htaindex.cnt.org/</a> .
	Massachusetts counties where median household income comprised of housing and transportation costs is below 45%	This measure tracks how many of MA's 14 counties have combined housing and transportation costs below 45% of median household income.
	Number of employees in sector energy and efficient energy resources sector.	This measure tracks the number of full-time and part-time permanent employees who support the clean energy portion of their business, including administrative staff and excluding interns and other temporary workers.

GOAL	MEASURE	DESCRIPTION
<b>Sustainable Economic Development</b>	Number of businesses defined as "clean energy firms"	This measures tracks the number of "clean energy firms, defined as companies directly involved with researching, developing, producing, manufacturing, distributing, or implementing components, goods, or services related to: renewable energy, energy efficiency or conservation, smart grid, energy storage, carbon management, and electric or hybrid vehicles.
	Number of megawatts of renewable or alternative energy installed	This measure tracks the number of megawatts of renewable or alternative energy installed in Massachusetts.
	Number of commercial fishing-related businesses	This measure tracks the sum of the number of seafood dealer permits plus the number of commercial fishing permits. The number of seafood dealer permits includes the following types: bait dealer, retail boat, retail store, retail truck, wholesaler broker, wholesale dealer, and wholesale truck. These permit types cover a variety of activities related to the purchase, sale, and resale of seafood products. The number of commercial fishing permits is the number of permits issued that allow the harvest and sale of marine species to permitted dealers.
	Number of employees at commercial fishing-related businesses	This measures tracks the number of employees at commercial fishing-related businesses in Massachusetts.
	Total commercial fishing economic impact (\$millions)	This measure tracks the economic impact of commercial fishing-related businesses in Massachusetts, using a commonly agreed multiplier of 3.1 times ex-vessel value.
	\$ ex-vessel value of commercial fishing (\$millions)	This measure tracks the value of seafood landed in Massachusetts ports. Ex-vessel value is the value of the catch when first entering the seafood supply chain before any processing.
	Estimated agriculture total economic impact in dollars.	This measure tracks the estimated total economic impact of farm and agriculture-related businesses in Massachusetts, beginning with farm revenue and adding processing and support industries.
	Number of employees at farm and agriculture-related businesses in Massachusetts	This measures tracks the number of employees at farm and agriculture-related businesses in Massachusetts.

GOAL	MEASURE	DESCRIPTION
<b>Sustainable Economic Development</b>	Number of farm and agriculture-related businesses in Massachusetts	This measure tracks the number of farm and agriculture-related businesses in Massachusetts.
	Total revenue of farm and agriculture-related businesses in Massachusetts (\$millions)	This measure tracks the revenue of farm and agriculture-related businesses in Massachusetts.
	Number of employees at forestry-related businesses	This measure tracks the number of employees at forestry-related businesses in Massachusetts.
	Number of forestry-related businesses	This measure tracks the number of forestry-related businesses in Massachusetts.
	Total revenue for forestry-related businesses (\$millions)	This measure tracks the revenue of Massachusetts' forestry-related businesses.
<b>Quality of Life</b>	Massachusetts annual attainment status for the six National Ambient Air Quality Standards (NAAQS).	This measure tracks the results from MassDEP's annual monitoring of pollutants listed in the federal Clean Air Act for which EPA has set National Ambient Air Quality Standards (NAAQS), including ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, particulate matter (PM10 and PM2.5) and lead. "Attainment" means that MA has not exceeded the allowable amounts.
	Percentage of contaminated sites (oil or hazardous materials) that are cleaned up within 6 years of first being identified or listed	This measure tracks the percent of contaminated sites (oil or hazardous materials) that are cleaned up within 6 years of first being identified.
	Percentage of contaminated sites with imminent hazard conditions where the imminent hazard is resolved within 90 days	This measure tracks the percent of hazardous waste contaminated sites with imminent hazard conditions where the imminent hazard is resolved within 90 days.
	Percentage of community public drinking water systems that meet all applicable health-based standards	This measure tracks the percent of community public drinking water systems that meet all applicable health-based standards.
	Number of MassParks Passes sold	This measure tracks the number of Resident and Non-Resident MassPark Passes sold by the Department of Conservation and Recreation, which allow free parking at over 50 facilities that charge a parking fee.

GOAL	MEASURE	DESCRIPTION
Quality of Life	Number of MassParks Passes Distributed Free to Libraries	This measure tracks the number of park passes distributed free to libraries by the Department of Conservation and Recreation. One free MassParks Pass is offered to the main branch of the public library in all 351 cities and towns in MA. Numbers reflect communities that have requested pass.
	Number of MassParks Passes Distributed Free to Municipal Parks and Recreation Departments	This measure tracks the number of park passes distributed free to communities by the Department of Conservation and Recreation. One free MassParks Pass is offered to the parks and recreation departments in all 351 cities and towns in MA. Numbers reflect communities that have requested pass.
	Number of inland fishing and hunting licenses sold annually in Massachusetts	This measure tracks the number of inland fishing and hunting licenses sold by MassWildlife.
	Number of boat ramps, fishing piers, canoe/cartop access sites, and ramps built or renovated	This measure tracks the number of boat ramps, fishing piers, canoe/cartop access sites, and ramps built or renovated in Massachusetts.
	Number of public municipal parks built or restored	This measure tracks the number of public municipal parks built or restored in Massachusetts.
	Number of Commonwealth Quality Program participants.	This measure tracks the number of organizations that have been designated under the Commonwealth Quality Program, a brand designed by the MA Dept. of Agricultural Resources to identify locally sourced products that are grown, harvested, and processed in MA using practices that are safe, sustainable, and don't harm the environment.
	Number of farmers' markets across the Commonwealth	This measure tracks the number of farmers' markets across the Commonwealth, defined as a group of farmers who have come together collectively to market their products directly to the consumer.
	Number of schools participating in the Farm to School Project	This measure tracks the number of schools that are participating in this program to bring locally-grown, farm-fresh food to schools.
GOAL	MEASURE	DESCRIPTION

<b>Quality of Life</b>	Number of urban communities establishing guidelines and/or regulations encouraging the development of commercial agricultural enterprises	This measure tracks the number of urban communities in Massachusetts encouraging the development and growth of businesses focused on making locally grown agriculture products available.
	Percentage of farmers' markets participating in the Supplemental Nutrition Assistance Program (SNAP)	This measure tracks the percent of farmers' markets in Massachusetts that accept Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) benefits for payment.
	System Average Interruption Duration Index (SAIDI) : NSTAR Electric Company	This measure tracks the average number of minutes of interruption in service per year for customers of NSTAR Electric Company.
	System Average Interruption Frequency Index (SAIFI): NSTAR Electric Company	This measure tracks the average number of service interruptions per year for customers of NSTAR Electric Company.
	System Average Interruption Duration Index (SAIDI) : Fitchburg Gas and Electric Company (Unitil)	This measure tracks the average number of minutes of interruption in service per year for customers of Fitchburg Gas and Electric Company (Unitil).
	System Average Interruption Frequency Index (SAIFI): Fitchburg Gas and Electric Company (Unitil)	This measure tracks the average number of service interruptions per year for customers of Fitchburg Gas and Electric Company (Unitil).
	System Average Interruption Duration Index (SAIDI): Massachusetts Electric Company (National Grid).	This measure tracks the average number of minutes of interruption in service per year for customers of NSTAR Electric Company.
	System Average Interruption Frequency Index (SAIFI): Massachusetts Electric Company (National Grid).	This measure tracks the average number of service interruptions per year for customers of NSTAR Electric Company.
	System Average Interruption Duration Index (SAIDI): Nantucket Electric Company (National Grid).	This measure tracks the average number of minutes of interruption in service per year for customers of Nantucket Electric Company (National Grid).
	System Average Interruption Frequency Index (SAIFI): Nantucket Electric Company (National Grid).	This measure tracks the average number of service interruptions per year for customers of Nantucket Electric Company (National Grid).
	System Average Interruption Duration Index (SAIDI) : Western Massachusetts Electric Company	This measure tracks the average number of minutes of interruption in service per year for customers of Western Massachusetts Electric Company.

GOAL	MEASURE	DESCRIPTION
<b>Quality of Life</b>	System Average Interruption Frequency Index (SAIFI): Western Massachusetts Electric Company	This measure tracks the average number of service interruptions per year for customers of Western Massachusetts Electric Company.
	Total production capacity of offshore renewable energy in state and adjacent federal ocean waters	This measure tracks the total production capacity in number of megawatts of renewable energy currently being developed in the ocean along the MA coast.
	Number of Green Communities in Massachusetts	This measure tracks the number of Massachusetts communities that have met the five criteria for designation as a Green Communities.
	Massachusetts American Council for an Energy-Efficient Economy (ACEEE) ranking	This measure tracks the annual ranking of US states by the American Council for an Energy-Efficient Economy (ACEEE) for energy efficiency policies and programs.
	National ranking of retail cost of energy	This measure tracks Massachusetts' national ranking based on the retail cost of energy.
<b>Resource Protection</b>	Number of million metric tons CO2 equivalent reduction from 1990 levels by sector (buildings, electricity, supply, transportation, non-energy).	This measure tracks the number of million metric tons CO2-equivalent reduction from 1990 levels. Sectors include buildings, electricity supply, transportation, non-energy.
	Number of acres of open space and working landscapes protected	This measure tracks the total acres of protected lands in the Commonwealth.
	Number of acres of water supply protected	This measure tracks the number of acres of water supply that are protected from potential threats that could impact its usefulness.
	Number of acres of protected via Agriculture Preservation Restrictions (APR)	This measure tracks the number of acres protected via this voluntary program which is intended to offer a non-development alternative to farmland owners of "prime" and "state important" agricultural land who are faced with a decision regarding future use and disposition of their farms. Towards this end, the program offers to pay farmland owners the difference between the "fair market value" and the "agricultural value" of their farms in exchange for a permanent deed restriction which precludes any use of the property that will have a negative impact on its agricultural viability.

GOAL	MEASURE	DESCRIPTION
<b>Resource Protection</b>	Number of acres of Prime Agricultural Soils protected	This measure tracks the number of acres protected of prime farmland that is best suited to farming.
	Number acres protected for BioMap2 Core Habitat and Critical Natural Landscapes	This measure tracks the number of BioMap2 core habitat acres protected of lands critical for survival of rare species and other species of conservation concern as well as a retention of a diversity of natural communities and intact ecosystems, and BioMap2 Critical Natural Landscape that complement Core Habitat, including large natural landscape blocks that provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience.
	Number of acres of Prime Forest Soils protected	This measure tracks the number of acres of protected lands actively managed for forest products.
	Number of wetland acres restored	This measure tracks the number of wetland acres restored annually, through dam removals, culvert replacements, sediment removal, and habitat improvements.
	Economic value of offshore renewable energy in state and adjacent federal ocean waters	This measure tracks the economic value of offshore renewable energy projects.
	Number of river miles restored annually	This measure tracks the number of river miles restored annually, through dam removals, culvert replacements, sediment removal, and habitat improvements.
	Percentage of assessed rivers that are determined to be impaired every other year	This measure tracks the percent of assessed rivers that are determined to be impaired (as defined by the Clean Water Act). Determinations are done every two years.
	Percentage of assessed lakes that are determined to be impaired every other year	This measure tracks the percent of assessed lakes that are determined to be impaired (as defined by the Clean Water Act). Determinations are done every two years.
	Percentage of assessed estuaries that are determined to be impaired every other year	This measure tracks the percent of assessed estuaries that are determined to be impaired (as defined by the Clean Water Act). Determinations are done every two years.
	Number of gallons of water used per person per day	This measure tracks the number of gallons of water used per person per day in Massachusetts.